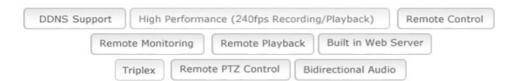
## **User Guide**

# vSync 0924i & 1624i MPEG4 9Ch / 16Ch Triplex DVR w/ 2Way-Audio









- · Real-Time Live Display
  - vSync924i 270FPS / vSync1624i 480FPS
- · vSync Client Software supports additional powerful remote control features
  - Powerful Live Connection & Customizable Camera Layout up to 80 channels
  - Embedded Web Server (Remote Configuration of all vSync DVRs)
  - Full Duplex Bi-directional Audio (2-way Communication)
  - Recording on Client PC, Alarm/Motion Indicator, eMAP, Digital Live Zoom
  - · Remote Relay Control, Remote PTZ Control.

Rev A. December 2007

Specifications and content are subject to change without notice.

## **TABLE OF CONTENTS**

1. I	Introduction	7
	1.1. Overview	7
	1.2. Summary of the Specifications of VSync924i & 1624i	9
	1.3. Packing List	10
2. I	Product Description	11
	2-1. Front Panel	11
	2-2. Rear Panel	13
	2-3. Remote Controller	15
	2-3-1. Alphabet Input with Remote Controller	16
3. (	Getting Started – Setting Up the DVR	17
	3-1. Setup – Main Screen	17
	3-2. Setup – Live	18
	3-3. Setup – Recording Mode	19
	3-3-1. Motion Zone Set Up	21
	3-3-2. Record Schedule	21
	3-4. Setup – Device Mode	23
	3-4-1. ALARM-OUT	24
	3-4-2. PTZ Control	25
	3-4-3. SPOT-OUT	26
	3-5. Setup – System Mode	27
	3-6. Setup – Security Mode	30
	3-7. Setup – Network Mode	31
	3-7-1. Ports	33
	3-7-2. Network Types	33
	3-8. Setup - Storage Mode	35
	3-9. Saving Setup	36
4. l	Local Viewing	37
	4-1. Live Window	37
	4-2. SEARCH Window	39
	4-3. Play mode	44
	4-4. PTZ Control	45

5. Archiving Video via USB or CD-RW	46
5-1. Capturing images or video	46
5-2. Transferring still images or video onto USB or CD-RW	47
6. Firmware Upgrade	50
6-1. Preparing USB memory with upgrade firmware	50
7. Network Client - Remote Monitoring and Playback	51
8. Remote Setup Using Embedded Web-Server of vSync924i & 1624i	52

## CAUTION

- THIS PRODUCT HAS MULTIPLE-RATED VOLTAGES (110V AND 220V). MAKE SURE TO SET THE VOLTAGE SELECTION SWITCH AT THE REAR PANEL TO THE PROPER VOLTAGE LEVEL OF YOUR REGION.
- THIS PRODUCT USES A LITHIUM BATTERY. THERE IS RISK OF EXPLOSION IF THE BATTERY ON THE MAIN BOARD IS INSTALLED INCORRECTLY. DISPOSE OF USED BATTERIES ACCORDING TO INSTRUCTIONS.
- THIS EQUIPMENT AND ALL COMMUNICATION WIRING IS INTENDED FOR INDOOR USE.
- TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THE UNIT TO RAIN OR MOISTURE.

## **Rack Mount Instructions**

- A) Elevated Operating Ambience If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (Tma) specified by the manufacturer.
- B) Reduced Air Flow Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.
- C) Mechanical Loading Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.
- D) Circuit Overloading Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.
- E) Reliable Earthing Reliable grounding of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips)."

# **CD-RW Installation Guide**

1. Open the top cover of vSync DVR set and Install the CD-RW inside the DVR.



2. Fasten the screws on both side of CD-RW as indicated in red circle below.





3. Connect the IDE CD-RW 40pin cable and Power cable to the point on both CD-RW and Main board as indicated in red circles below. Set the CD-RW jumper setting as "MASTER"



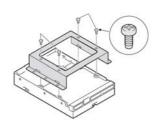


## Compatible CD-RW model

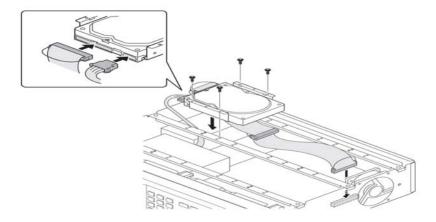
Sony CRX230EE or contact the vSync DVR distributor for other models.

## **HDD Installation Guide**

1. Mount the bracket to the hard disk using the supplied HDD mounting bracket screws.



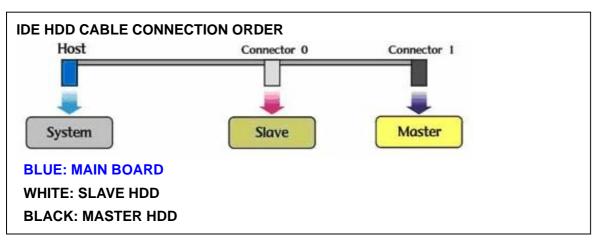
2. Connect the supplied IDE HDD 80pin cable and Power cable to the hard disk and mount the hard disk to the unit using the supplied HDD screws.



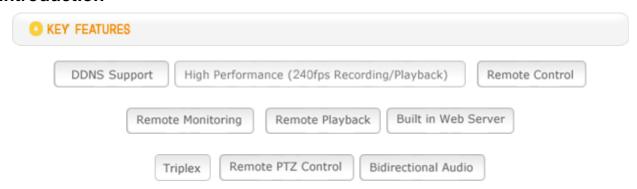
3. HDD JUMPER SETTING

1<sup>ST</sup> HDD = MASTER

2<sup>nd</sup> HDD = SLAVE



### 1. Introduction



#### 1.1. Overview

- Triplex MPEG-4 9/16 Channel DVR with Real-Time Live Display and Simultaneous Play Back.
- vSync924i & 1624i, (vSync924i Nine channel model & vSync1624i Sixteen channel model).
- vSync924i & 1624i features powerful embedded RTOS (Real Time Operating System).
- MPEG-4 video codec (video encoder/decoder), delivers uncompromised performance providing high compression plus high quality video images.
- vSync924i & 1624i increases the days of recording between overwrite periods while improving the quality of video images. Full triplex capability ensures uninterrupted recording.
- vSync DVR supports simultaneous:
  - 1. Video Recording
  - 2. Live Video Monitoring up to 80 cameras
    - Locally via video outputs.
    - Remotely via vSync network client software and viSync Central Monitoring Software.
  - 3. Play Back or File archiving via USB 2.0 port and CD-RW.

Or

- 1. Video Recording
- 2. Remote Playback via vSync network client software and viSync CMS.
- vSync software also allows the administrator to remotely connect to, monitor, and manage multiple networked DVRs. The vSync software logs the operation, motion, and alarm statuses of sites throughout the day for later analysis. The vSync software lets you search based on time or event, record on a remote PC, and retrieve video clips from remote sites.
- vSync software supports additional powerful remote control features,
  - Powerful Live Connection & Customizable Camera Layout up to 80 channels,
  - Embedded Web Server (Remote Configuration of all vSync DVRs)
  - Full Duplex Bi-directional Audio (2-way Communication)
  - Recording on Client PC, Alarm/Motion Indicator, eMAP, Digital Live Zoom
  - Remote Relay Control, Remote PTZ Control.

- NAFS (Network-Attached File Server) file systems provide a cluster-based network-attached file server which offers a high level of performance, reliability, and availability.
  - Ex. Prevention of data loss and corruption in the event of a power failure.
- Multiplexing operation.
- State-of-the-art live monitoring and playback both locally and remotely.
- Individual channel recording and playback with different frame rates.
- Hidden Channel Mode on selected channels provides extra privacy and uninterrupted recording.
- Embedded Web-Viewer provides direct access using IP address or DDNS address in Internet Explorer.
- Multi-site management via network: up to 80 cameras.
  - Supported by vSync network client software and viSync CMS.
  - Remote live monitoring & recording, playback, backup, PTZF control & Presets, relay sensor control, eMAP, Digital Live Zoom, and 2-way communication.
  - Remote DVR management via embedded Web-Browser for easy adjustments.
  - Mobile phone & PDA viewing integration.
- Network via LAN, DDNS, DHCP, ADSL (Dynamic and Static IP addresses).
- Full duplex 4 Channel G.711 synchronized audio recording and Bi-directional Audio Communication.
- Built-in Quad Multiplexer provides sequential or quad display on all or selected channels.
- User-friendly setup menu with simplified G.U.I.(Graphic User Interface).
- Easy to schedule weekly recording plans.
- Motion detection Use the 30x24 grid to define motion zones for each camera.
- Internal Pan/Tilt/Zoom/Focus controller.
- Easy operation via front panel and optional remote controller.
- Increased security by user name and password verification.
- Video loss detection.
- Backup Still-images or AVI data onto USB storage device, internal CD-RW, or Network.
- USB port for JPEG/MPEG data backup and software upgrade using USB storage device.
- Still image capture and review as JPEG format.
- Variety of Hard Drive Sizes up to 2TB internally (500GB HDD X 4) for long-term recording.
- Multi-Languages User can easily select language from Setup menu.
- Various Video Outputs VGA(800x600 24-Bit Color), TV-Out, S-Video, SPOT-Out, Loop-Out.

## 1.2. Summary of the Specifications of VSync924i & 1624i

Item		Description	Remarks
Operating System		RTOS in firmware	
Video/Audio		MPEG-4(video) / G.711-PCM (audio)	
Compr	ession		
Triplex F	unction	Record/Playback/Live Streaming or Record/USB archive/Live Streaming	
Video Inpi	ut Format	NTSC/PAL	Auto-Detection
Video Input		9 Ch (16 Ch) In	
Video (	Output	1Ch VGA, 1 Ch BNC (Composite), 1Ch Spot-Out. 9Ch(16Ch) Loop-Out, 1 Ch S-VIDEO	
Display	NTSC	270(480) frames/sec Real-Time	9 Ch(16 Ch) x 30 frames/sec
Frame Rate	NISC	(Hidden Display Function)	
Traine reace	PAL	225(400)frames/sec	25 frames/sec/Ch
Recording	NTSC	240 frames/sec	
Frame Rate	NISC	(Hidden Record Function)	352x240 resolution
(Quad)	PAL	200 frames/sec	352x288 resolution
Recording Frame Rate	NTSC	60 frame /sec (total)	704 x 480 resolution
(Full)	PAL	50 frame /sec (total)	704 x 576 resolution
Record Modes		Continuous/Motion/Schedule/Sensor/Manual	
Record	Quality	Network/Standard/High/Superior/Ultra	
		NTSC : 704 x 480(1 CH), 352x 240(Quad)	
Resol	lution	PAL : 704 x 576(1 CH), 352 x 288(Quad)	
		Supports CIF, Half D1 & Full D1	
Audio Input/Output		4 Ch Input/1 Ch Output	
Channel		2-way communication(Bi-Directional) Audio via network	
Alarm In/Alarm Output		9/16 Alarm Input (NC/NO selectable) / 8 Relay Output	
HDD		3.5", IDE type9 (IDE ATA133 Type), Min 80GB up to 4 IDE HDDs	
CD-RW		Optional CD-RW	
Motion Detection		Motion-Triggered Recording	
Search Mode		Date/Time/Event Search	
Playbacl	k Speed	1x, 2x, 4x, 8x	

Serial Interface	1 RS-232C (POS text inserter connection)
1100	1 RS-422/485 (for PTZ control)
USB	Archiving (still images in JPEG format, video in AVI format), Firmware upgrade
Upgrade Method	USB 2.0 Port or Web-Browser
PTZ Control	Local & <b>vSync</b> Client Software
Network Interface	LAN(10/100Base-T), Static, DHCP, PPPoE, and DDNS
	Window2000/XP/Vista
	Live Connection & Customizable Camera Layout up to 80 channels
Client PC S/W	Embedded Web Server (Remote Configuration of all vSync DVRs)
( <b>vSync</b> )	Full Duplex Bi-directional Audio (2-way Communication)
	Recording on Client PC, Alarm/Motion Indicator, eMAP, Digital Live Zoom
	Remote Relay Control, Remote PTZ Control
Remote Playback	Via vSync Client Software
Power	110/220V, 50/60Hz

## 1.3. Packing List



HDD Mounting Brackets (2ea)
(Preinstalled when unit is shipped with HDD(s))



# 2. Product Description

## 2-1. Front Panel





Figure 2.1. Front Panel of vSync924i & 1624i

Table 2.1.1. Indication LEDs

Name	Description	
HDD	LED illuminates when system is accessing the hard disk drive.	
REC	LED illuminates when recording is enabled.	
ALARM	RM LED illuminates when alarm sensor(s) is/are triggered or detects video motion.	
	(Alarm sensor(s) and/or video motion detection must be configured first).	
NETWORK	LED illuminates when clients connect through vSync software via network port.	
POWER	LED illuminates when the DVR unit is on.	

Table 2.1.2. Buttons on the Front panel

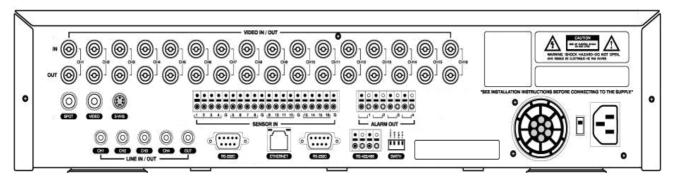
Name	Description		
POWER	Power ON/OFF. (Prompts for password before shutdown) Configure settings for		
	power down in the SECURITY Setup Menu. The default password is "1111".		
DIS	Press to select full, quad, 9 or 16 split-screens in live display mode.		
SEQ	Press to start auto-sequencing in 1 Ch, 4 Ch, 9 Ch, or 16 Ch display modes.		
AUDIO	Press to select audio mode.		
	Disable or Mute all 4 channels or selected channels only.		
PTZ	Press to initiate PTZ control		
SETUP	Press to launch SETUP menu.		
ALARM	Press to silence alarm operation.		
ARCHIVE	Press to review the ARCHIVE LIST in live display mode.		
CAP/USB	Press to take a snapshot, or capture still images (JPEG format), during live or		
	playback modes.		
REW/LOG	(During Playback) Press to rewind video footage at 1x, 2x, 4x, and 8x speeds or		
	to see the LOG LIST in live display mode.		
F/REW	Jump/Step backward.		
	In playback mode, the playback position reverses/jumps backwards 60 seconds.		
F/ADV	Jump/Step forward.		
	In playback mode, the playback position moves forward 60 seconds.		
FF	(From Playback Mode)		
	Pressing fast forward advances footage at 1x, 2x, 4x, and 8x speeds.		
PLAY/PAUSE	From Live Display Mode: Press to enter SEARCH menu.		
	From Playback Mode: Press to play or pause video.		
REC	Press to start or stop manual recording.		

A .	Press to scroll up in the menu or to change values in setup mode.
UP	(Also used as the number 1 when entering a password.)
<b>b</b>	Press to scroll right in the menu or to change values in setup mode.
RIGHT	(Also used as the number 2 when entering a password.)
137	Press to scroll down in the menu or to change values in setup mode.
DOWN	(Also used as the number 3 when entering a password.)
4	Press to move left in the menu or to change values in setup mode.
LEFT	(Also used as the number 4 when entering a password.)
SEL	(Surrounded by the direction control keys)
	Pressing selects desired menu item or saves setup values in menus.
ESC	Press for temporary storage of the changed value or to return to the previous
	menu screen.
USB Port	The USB Port is located on front panel's bottom right corner.
	This USB port is used to archive recordings onto a USB storage device or upgrade
	firmware with a USB storage device.

## 2-2. Rear Panel



vSync924i



vSync1624i

Figure 2.2. Rear Panel

**Table 2.2.1. Connectors and Switches on Rear Panel** 

Name	Function	
VIDEO IN	9/16 BNC connectors for video input.	
	Connect camera output to Video-in (NTSC/PAL)	
VIDEO OUT	9/16 BNC connectors for video output. (Loop-Out)	
SPOT	Composite video output for spot monitoring. (Built-in Quad Multiplexer)	
VIDEO	Composite video output in NTSC or PAL format	
S-VHS	S-Video output	
VGA	Connect to a VGA monitor 15-pin connector	
AUDIO IN	4 RCA connectors for audio input.	
AUDIO OUT	1 RCA connector for audio output.	
RS-232	POS text inserter connection	
LAN	RJ-45 connector for Ethernet connection.	
RS-485/422	For Pan/Tilt/Zoom control.	
SENSOR IN	Connector for external alarm sensor/contact devices alerts the vSync DVR and allows it to respond to events. 9/16 sensors can be connected to the DVR sensor 1~9/16 dedicated to Video Channel 1~9/16 correspondingly.  Connect 2 wires to activate a sensor input to the Terminal Block on the rear panel of the vSync DVR. A ground wire from the external device to the unit ensures that the ground reference voltage is identical. This line connects to the Terminal Block G input.	
ALARM OUT	8 (PGM) connectors for alarm device connection.  Provides simple On/Off switching using relay (not included).  0.5A/125V or 1A/30V. The relay is open when not triggered. The relay can be close	
	by either a motion or a sensor input, only if enabled in the Recording Setup menu.	
POWER	Connector for AC115/220V power cable.	

DIP SWITCHES		
TEST	For future use.	When you change the position of the
RSV	Reserved.	switch, reboot the DVR to apply the new
VGA	Turn ON for VGA monitor use.	setting. When VGA is on, Video-Out will
PAL	Turn ON for PAL use.	be disabled!

## 2-3. Remote Controller



POWER	Power On/Off
DISPLAY	Displays Full, Quad or 9/16 Ch. Split View
F/REW	Jump 60 Seconds Backwards
PLAY	Play/Pause
F/ADV	Jump 60 Seconds Forwards
FREEZE/CAP	Freeze/Screen Capture
FF	Fast Forward
ALARM	Silence/Mute Alarm Operation
SETUP	Setup Menu
ARCHIVE	Displays Archive List
AUDIO	Disable/Mute or Highlighted Channel Only
LOCK	Locks front panel and remote for all functions
SEQ	Sequences Full or Quad View
RECORD	Manual Recording
SEARCH	Search Menu Screen
DIRECTION	Direction or Number 1 to 4
SELECT	Enter
ID	DVR ID (ID Button + DVR ID number)
ESC	Escape
PTZ	PTZ Menu Screen
NUMBER	Channel 1 to 9
	CH 10->press +10 and number 0
+10	CH 11->press +10 and number 1
	CH 12->press +10 and number 2
	CH 13->press +10 and number 3
	CH 14->press +10 and number 4
	CH 15->press +10 and number 5
	CH 16->press +10 and number 6

## 2-3-1. Alphabet Input with Remote Controller

The Numeric keys of the remote controller can be used to enter letters when alphabet input is needed in parameter setting. The scheme follows the same pattern of a telephone keypad.

For example, press the number "2" continuously to change the input value to "2, A, B, C, a, b, c, 2... ".

This mode is useful for assigning channel names, DDNS, or ADSL configuration information.

The following table details the assignment of letters to the numeric keypad.

Table 2.3.1.1. Alphabet Input with Numeric Keypad of the Remote Controller

Numeric Key	Input Values
1	1
2	A, B, C, a, b, c, 2
3	D, E, F, d, e, f, 3
4	G, H, I, g, h, i, 4
5	J, K, L, j, k, I, 5
6	M, N, O, m, n, o, 6
7	P, Q, R, S, p, q, r, s, 7
8	T, U, V, t, u, v, 8
9	W, X, Y, Z, w, x, y, z, 9

## 3. Getting Started - Setting Up the DVR

The following sections detail the initial setup of the vSync DVR.

## 3-1. Setup - Main Screen

Pressing the **Setup** button prompts a user for entry of a password. The default password is "**1111**". Input the default password by pressing the **Up button** 4 times, followed by the **SELECT** button.

(We recommend that you protect your DVR system by assigning a new password. Refer to section 3.6 for instructions.)

After assigning a new password, enter it by using the direction arrow keys (representing 1, 2, 3, & 4) or using the keypad, and then press the SEL button for entering into the Setup menu shown in Figure 3.1.1. Navigate through the menu icons using the directional buttons and press the **SELECT** button to enter into sub-category menus.

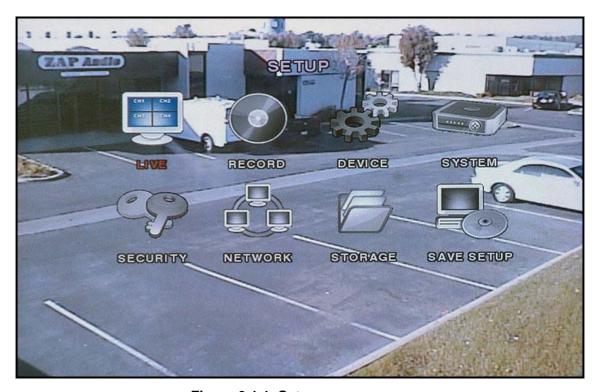


Figure 3.1.1. Setup menu screen

## 3-2. Setup – Live

- Used for setting up the live display mode.

Navigate through menu items using the **Up/Down** buttons. Change the values using the **Left/Right** buttons.



Figure 3.2.1. Live mode setup screen

Table 3.2.1. Menu items in LIVE mode setup

Item	Description
OSD	Enables/disables on-screen-display.
SEQUENCE	Enables/disables sequential video channels display in full screen mode.
SEQ-DWELL TIME	Sets dwell time for each channel in sequential display mode.
OSD CONTRAST	Sets the contrast level of On Screen Display (OSD)
CHANNEL	Selects channel to apply settings.
DISPLAY	Enables/disables Hidden Channel Mode on selected channel.
BRIGHTNESS	Brightness value for the specified channel.
CONTRAST	Contrast value for the specified channel.
HUE	Hue value for the specified channel.
SATURATION	Saturation value for the specified channel.

## 3-3. Setup - Recording Mode

- Controls video recording attributes

Navigate through the menu items using **Up/Down** buttons. Change values using **Left/Right** buttons.



Figure 3.3.1. Recording mode setup screen

Table 3.3.1. Menu Items in Record Mode Setup

Menu item	D	escription
RESOLUTION	Configures resolution as 704x	480, 704x240, or 352x240(NTSC).
CHANNEL	Selects channel to apply settir	ngs.
FRAME RATE	Configures the frame rate for s	selected channel.
	Frame Rate and Recording Re	esolution are interdependent.
	The 9/16 channel frame rate	sum may not exceed the maximum
	frame rate supported by the re	esolution.
	The following table shows the	maximum frame rate for NTSC video.
	Resolution	Max. Frame Rate
	320x240	240 FPS
	704x240	120 FPS
	704x480	60FPS

QUALITY	Configures the recording quality for selected channel.	
	Network, Standard, High, Super, Ultra.	
	Video quality is the best on "Ultra" setting (Network quality is	
	designed for very low upload bandwidth conditions (i.e. weak WAN	
	connections).	
RECORDING	Assigns the recording method for a channel:	
	Disable, Continuous, Motion, Sensor, or Schedule.	
MOTION ZONE	Sets full zone or partial zone.	
MOTION SENSITIVITY	Sets motion detection sensitivity for selected channel from 1 to 9.	
	(9 is the most sensitive setting.)	
SENSOR RECORDING	Configures Alarm/Sensor Inputs for triggered recording. There are	
	16 sensors total (9 for vSync924i). A maximum of 4 sensor/alarm	
	Inputs may be assigned to an individual channel.	
PRE RECORD	Enables/disables pre-event/pre-alarm recording.	
	Pre-event/pre-alarm recording is 5 sec. Only i-frames are recorded.	
POST EVENT RECORD	Set the length of time for post-event/post-alarm recording video.	
	Configurable by channel from 1 to 30 seconds.	
AUDIO	Enables/disables audio by channel.	
	There are 4 channels of audio inputs and a single audio output.	
SCHEDULE	Configures recording schedules.	
	Launches new menu as shown in Figure 3.3.3.	

## 3-3-1. Motion Zone set up

By selecting **Partial Zone**, users can define motion zones within a screen area, as shown in Figure 3.3.1. Move each rectangular zone around using the four direction key buttons. Press the **SELECT** button to save the defined rectangular region as part of the motion zone. Upon saving, the defined rectangular blocks will change color.



### **Important:** Only selected zones will trigger motion recording.

Figure 3.3.1. Motion Zone selection screen

#### 3-3-2. Record Schedule

- Records video based on a defined schedule.

The following table (3.3.3) defines button functions within this menu.

Navigate through menu items using the **Up/Down** buttons. Change the values using the **Left/Right** buttons. Each vertical bar " | " corresponds to one hour. See Figure 3.3.3 for a menu example.

#### Rules:

- 1. Choosing **ALL**, **vSync DVR** globally applies the schedule to all time periods and channels.
- 2. Within a selected channel, a recording mode applies to the entire time period for the specific channel.
- 3. Within a selected time period, when highlighting one of the vertical bars " | ", the selected recording mode applies to all channels.

**Rev A. December 2007** 21

Specifications and content are subject to change without notice.

Table 5.5.5. Button I unctions in Necoluling Time Scheduling Mode		
Button	Function	
REW	Use to set Continuous recording mode.	
F/REW	Use to Disable recording setting.	
PLAY/PAUSE	Use to enable Motion detection triggered recording.	
FF	Use to enable Sensor triggered recording	
UP	Move up in menu item.	
RIGHT	Move right in menu item.	
DOWN	Move down in menu item.	
LEFT	Move left in menu item.	
SEL	Exit from scheduling mode.	

Table 3.3.3. Button Functions in Recording Time Scheduling Mode

## Copying of a Schedule:

The following picture shows the copying of a schedule from Ch 1 to Ch 2 (useful for copying the schedule of one channel to another channel).



Figure 3.3.3. Recording Schedule Set-up Screen

## 3-4. Setup – Device Mode

- Configures values for device settings.

Navigate through menu items using the **Up/Down** buttons. Change the values using the **Left/Right** buttons.



Figure 3.4.1. Device mode setup screen

Table 3.4.1. Menu items in Device Setup screen

Item	Description
ALARM-OUT	Set the sensor, motion, video loss, and options for each alarm.
PTZ	Sets the camera's pan speed, number, type and ID
SPOT-OUT	Configures the spot monitor output type (sequential or quad), and channel
	select.
<b>KEY TONE</b>	Enable/disable key tone audio. The vSync DVR beeps for each keystroke on
	the front panel or remote controller.
REMOTE	Enter an ID for the remote controller. ID can range from 00 to 99, and is
CONTROL ID	convenient when using multiple vSync DVR.
SENSOR	Select a sensor from 1 to 16.
TYPE	Set the style of contact/alarm input for a specified sensor number.
	Choose None, N/O (normally open), and N/C (normally closed).

#### **3-4-1. ALARM-OUT**



Figure 3.4.1.1. Alarm-out setup screen

Table 3.4.1.1 Menu Items in ALARM-OUT Setup Screen

Item	Description	
ALARM OUT	Select alarm outputs from 1 to 8.	
SENSOR IN	Enable up to 4 sensors out of a total of 16.	
MOTION ON	Enable up to 4 cameras out of a total of 16.	
VIDEO LOSS ON	Enable up to 4 cameras out of 16 cameras.	
	(From Multi Channel the video loss occurs simultaneously, one	
	initial channel is notified with e-mail address in network setup)	
ALARM DURATION	Sets the alarm duration from 1 to 60 seconds.	

#### 3-4-2. PTZ Control

To control the PTZ functions of a camera, connect the controller to the RS-485 port.

For speed dome cameras that supports RS-485, connect them directly to the RS-485 port. For cameras using RS-232C, a Signal Converter (RS-485 to RS-232C) is needed (not included).

From the PTZ Control setting setup menu, select/set the protocol for the camera manufacturer you wish to control. If the camera uses a specific camera ID, select the camera ID by using the Left or Right buttons.



Figure 3.4.2.1. PTZ setup screen

Table 3.4.2.1. Menu item in PTZ Setup screen

Item	Description	
СН	Select the channel number for the PTZ device setup.	
NAME	Navigate through the list of PTZ cameras (protocol type) by	
	using the LEFT and RIGHT arrow buttons and make a	
	selection.	
SPEED	Configure the speed (baud rate) of the RS-485	
	communication port by using the LEFT and RIGHT buttons.	
ID	Program the PTZ address. (0-63)	

#### 3-4-3. SPOT-OUT



Figure 3.4.3.1 Spot-Out Setup Screen

Table 3.4.3.1. Menu Items in SPOT-OUT Setup Screen

Item	Description	
SPOT TYPE	Configure the display mode, either full or quad view for the spot	
	monitor output.	
SPOT ON EVENT	Enable/disable spot monitor upon events.	
SPOT EVENT	Set the dwell time for the spot event monitor from 1 to 10 seconds.	
DWELL TIME		
SEQUENCE	Enable/disable SEQ button.	
SEQ-DWELL TIME	Set the channel sequence dwell time.	
SPOT CHANNEL	Select the channel(s) to display on the Spot Monitor.	

## 3-5. Setup - System Mode

- Configures system parameters

Navigate through menu items using the **Up/Down** buttons. Change the values using the **Left/Right** buttons.



Figure 3.5.1. System Setup Screen

Table 3.5.1. Menu Items in System Setup Screen

Item	Description
DVR ID	Defines the system name. Navigate through the position for each
	alphanumeric character by using the left and right buttons.
	Up/down buttons change characters.
DESCRIPTION	Displays system information:
	Firmware Version, Storage Size, IP Address, and MAC Address.
LANGUAGE	Select a language for all OSD (on screen display)
LOAD FACTORY	Select OFF or ON. To load default values, choose ON, then press
DEFAULT	the SEL button.
LOAD DEFAULT	Select OFF or ON. ON loads the default values, with the
	following exceptions: Password, Date format, DLS setting,
	Network parameters, HDD overwrite mode.
DATE FORMAT	Configures the preferred display style for the date and time.

28



Figure 3.5.2. DVR ID Setup Screen



Figure 3.5.3. DVR Information Display Screen

Rev A. December 2007

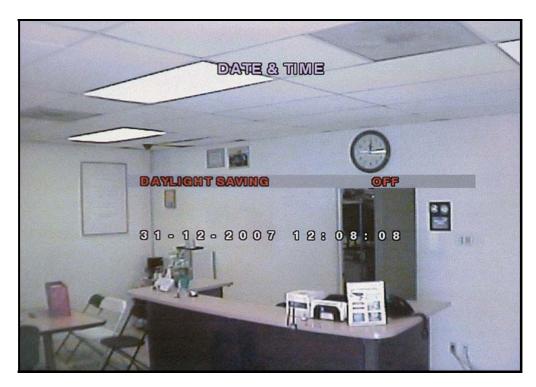


Figure 3.5.4.Set Date & Time Setup Screen

Table 3.5.4. Menu Items in Date & Time Setup

SET DATE&TIME	Warning! Changing this setting initiates a system reboot. Set date and
	time. After changing, press the SEL button and select <b>CONFIRM</b> .
DAYLIGHT	Configures automatic adjustment for Daylight Savings Time.
SAVINGS	Use the LEFT or RIGHT buttons to enable/disable.
	After selecting ON, move the cursor to the BEGIN (MM/DD/HH) field.
	Press the SELECT button to set the DLS start time. Scroll to the END
	(MM/DD/HH) field.
	Set the DLS stop time by using the UP or DOWN buttons.
	CAUTION: PLEASE NOTE TO PREVENT ERRORS
	-DLS can't start from 23:00.
	-The BEGIN DATE and END DATE CANNOT be the same.

## 3-6. Setup - Security Mode

- Assign new password and security parameters here.

Navigate through menu items using the Up/Down buttons. Change the values using the Left/Right buttons.



Figure 3.6.1. Security Setup Screen

Table 3.6.1. Menu Items in Security Setup Screen

Item	Description	
ADMIN PASSWORD	Sets the administrator password. Once selected, the DVR will	
	prompt for the current password and new password.	
	Follow the prompts. The numbers 1, 2, 3 and 4 can be input by using	
	direction keys UP, RIGHT, DOWN, and LEFT, respectively.	
	The keypad can be used to input all characters from 0 – 9.	
	The default password is "1111".	
	The Admin Password allows access to all DVR features.	
USER PASSWORD	Sets the user password. Once selected, the DVR will prompt for the	
	current password and new password.	
	Follow the prompts. The numbers 1, 2, 3 and 4 can be input by using	
	direction keys UP, RIGHT, DOWN, and LEFT, respectively.	
	The keypad can be used to input all characters from 0 – 9.	
	The default password is "1111".	
	User has access only for search features.	

NETWORK PASSWORD	Sets the network client connect password. The DVR prompts for the	
	entire process of setting up a network password.	
	The numbers 1, 2, 3 and 4 can be input by using direction keys UP,	
	RIGHT, DOWN, and LEFT, respectively.	
	The keypad can be used to input all characters from 0 – 9.	
	The default user ID is "root" and the default password is "1111".	

## 3-7. Setup – Network Mode

- Configures network parameters used for remote clients that connect to the DVR over a network or other network features.

Navigate through menu items using the **Up/Down** buttons. Change the values using the **Left/Right** buttons. If you do not understand the following settings, consult your network administrator.

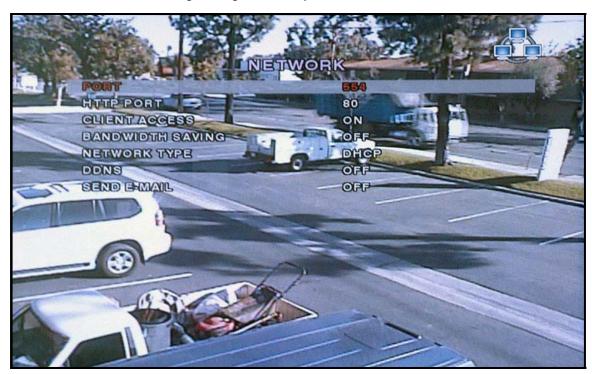


Figure 3.7.1. Network Setup Screen

Table 3.7.1. Menu Items in Network Set-up Setup Screen

Item	Description	
PORT	RTSP port number	
HTTP PORT	HTTP Port number	

CLIENT ACCESS	Enables/Disables network client access
BANDWIDTH SAVING	Enables/Disables key frame transmission only. This feature is useful
	when network bandwidth is not enough for live streaming.
NETWORK TYPE	Type of network
DHCP	Enables/Disables DHCP connection (Dynamic IP address)
IP	Static IP address
GATEWAY	Gateway IP address
SUBNET MASK	Network Subnet Mask address
DNS	DNS server IP address. Valid DNS address is needed for E-mail
	transmission and use of DDNS.
DDNS	Domain name for the DDNS server. DDNS is used to resolve dynamic
	IP address by assigning a host name to replace the IP address for the
	connection.
Send E-mail	Setting this value to "ON" initiates e-mail transmission as follows
	through the designated email server. Set to "ON", and press SEL button
	to BEGIN e-mail configuration.
	For use with DHCP (Dynamic IP) servers.
	On: 1. "ALARM + IP"
	2. "ALARM EVENT"
	3. "NOTIFY IP"
	Off: alarm = alarm event: capture JPG file and emails
1. Alarm + IP	A combination of "Alarm Event" and "Notify IP"
2. Alarm Event	If an event occurs, the DVR sends an email to a specified recipient with
-	a JPG file of the event.
3. Notify IP	If the DHCP server assigns a new IP address to vSync DVR, the DVR
	sends an email to a specified recipient with the new IP address
Mail Address	Input the designated recipient's address.
Mail Server Name	Enter the name of your SMTP server.
ID	Enter your SMTP server user ID.
Password	Enter your SMTP server password.
Return Address	Warning: Some incoming e-mail servers block e-mail reception from
	unverified return e-mail addresses. Enter a valid e-mail address
	associated with the passwords above.

#### 3-7-1. Ports

#### Port-Forwarding for Access from a WAN

When one or more DVRs are connected through a IP sharing device (i.e. router) to a larger network (i.e. the internet), in order to access each unit from outside the local area network, each device must have a unique RTSP (Real Time Stream Protocol) and HTTP port number. You must also configure your IP sharing device for port-forwarding, so that each port, when accessed on the IP sharing device, will forward to the appropriate DVR's IP and or MAC address. The port number is listed next to the "Port" menu option in the Network menu.

If you only plan to access multiple units from <u>within a local area network</u>, you do not need to change the RTSP and HTTP port numbers, unless other IP sharing devices establish in-between the client and the DVRs.

To access the DVR, you must have the following information:

When accessing from the same LAN

DVR IP Address
The router or Gateway IP addresses
(The IP address of the IP sharing device)

RTSP port number
RTSP port number
HTTP port number
Username
Password
Usersses
Usersses
Usersses
Usersses
(The IP address of the IP sharing device)

RTSP port number
HTTP port number
Usersses
Password

**Table 3.7.1.1 Information Needed for Network Access** 

#### 3-7-2. Network Types

Configure one of three network types: LAN, DHCP, or ADSL

Each type requires different settings.

#### LAN

To use the LAN option when connecting the DVR to a network, the following information is required. If you do not have this information, see your network administrator.

Item Description

IP The fixed IP address of the DVR

GATEWAY The IP address of the gateway

SUBNET MASK The subnet mask for the LAN

Table 3.7.2.1. Network Parameters for LAN

#### **DHCP**

Select DHCP (for Dynamic IP Addressing) to enable this feature. The DHCP server or a router automatically assigns the unit an IP address and other appropriate TCP/IP settings. After connecting to the network, view the assigned IP address by selecting **DESCRIPTION** from the **SYSTEM** menu.

If the network connection does not offer additional IP addresses, use an IP sharing device to remedy the issue. Port-Forwarding may be necessary in order to connect to this device. Also, if a firewall is deployed in the IP sharing device, the selected ports must be opened to the outside network. For more information on Port-Forwarding, see the documentation for your IP sharing device (router) or contact your local authorized vSync DVR distributor.

#### **ADSL**

**vSync DVR** supports direct PPPoE connections to ADSL modems without a router. The following information is required. If you do not have this information, contact your network administrator.

 Item
 Description

 ID
 The user ID for the ADSL connection

 PASSWORD
 The password for the ADSL connection

Table 3.7.2.2. Network Parameters for ADSL

The ADSL modem connection must have an RJ-45 jack to connect to the DVR (USB Networking is not supported).

Sharing an ADSL connection with other devices requires an IP sharing device such as router. In this case, select LAN as the NETWORK type. Port-forwarding is required in order to access the vSync DVR through a GATEWAY/Router and/or Firewall. See the documentation for your IP sharing device or contact your network administrator to learn more about port-forwarding. If your router has QoS (Quality of Service) and gaming feature, you may want to enable this for the IP address of the DVR. Some ISPs block some ports commonly used for streaming video. If your ISP blocks the default port, simply change the port number to an unblocked port. See the ISP technical support web page for additional help troubleshooting blocked ports.

## 3-8. Setup - Storage Mode

-Configures the hard disk record mode, or initiates a hard disk format.

Navigate through menu items using the **Up/Down** buttons. Change the values using the **Left/Right** buttons.



Figure 3.8.1. Storage Setup Screen

Table 3.8.1. Menus in Storage Setup

Item	Description
	When enabled, the DVR will continue recording and overwrite the
OVERWRITE	oldest existing recorded data once the hard drive is full.
	When disabled, recording will stop once the hard drive is full.
FORMAT	Formats the hard disk drive.
DISK INFO	Displays HDD(s) disk information.
LOAD SETUP FROM A USB	Loads DVR setup parameters from the USB memory.
	Stores DVR setup values to USB memory.
SAVE SETUP TO A USB	This feature is useful when copying the setup parameters of one
	DVR to other DVRs or for building templates.
RECORD LIMIT	Turns recording limit on/off for overwrite.
RECORD LIMIT DAYS	Set number of days for the record limit. Only functions when
	"Record Limit" is on.

## 3-9. Saving Setup

To preserve changed setup values, select the SAVE SETUP menu and select YES. Unsaved setup values will be lost if this step is ignored or not applied properly.



Figure 3.9.1. Save Setup Screen

## Certain changes require that the system is restarted in order to take place.

These features will ask for a confirmation and are as follows:

• Load Factory Default, Set Time & Date, Network, Format, Load Setup from a USB



Figure 3.9.2. Save Setup Screen

# 4. Local Viewing

## 4-1. Live Window

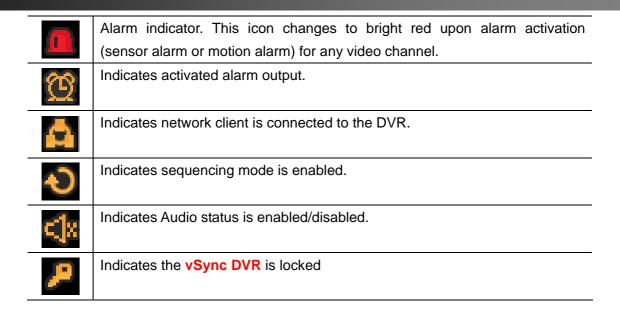
Video from connected cameras are displayed on the Live Setup configuration screen. Symbols indicate the DVR's status. Refer to Table 4.1.1 for a legend.



Figure 4.1.1. Live Window

**Table 4.1.1. Indicator ICONS in Live Window** 

Icon	Description
	Continuous recording in progress
	Manual recording in progress
À	Motion recording in progress
	Sensor recording in progress



**Table 4.1.2. Button Functions in Live Window** 

Button	Description
SETUP	Launches SETUP menu.
SEQ	Enables/disables automatic sequential switching in full or quad
	modes.
	Quad mode also follows these settings.
PLAY/PAUSE	Launches the SEARCH window.
Directional	Select a channel by using the directional keys. Selected channels
Buttons	show the channel ID in yellow.
SEL	When a channel is selected, press SEL button to expand the
	channel to full screen.
ESC	No action, backs out of last menu.
REC	Starts manual recording for all channels.

### 4-2. Search Window

Press PLAY/PAUSE button to launch the search menu. The screenshot shown in Figure 4.2.will appear. Select "TIMELINE", "EVENT", or "DIRECT" to initiate a search for recorded video.



Figure 4.2. Search Mode Screen

### 4-2-1. TIMELINE Window

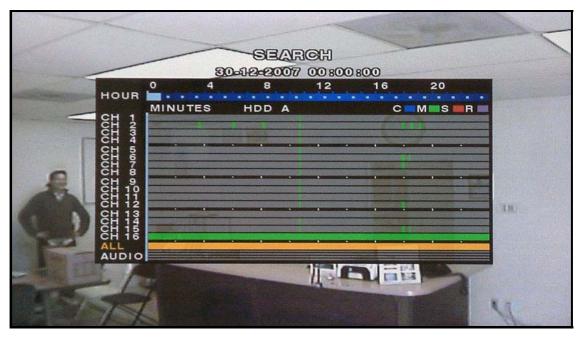


Figure 4.2.1. Timeline Search Mode Screen

Rev A. December 2007

- 1. Select the option "TIMELINE" and a calendar will appear (Figure 4.2.1).
- 2. Select the date of the video by using the LEFT, RIGHT, UP, and DOWN buttons to navigate through the days.
- 3. Press the SEL button to move to the timeline search window.
- 4. Use LEFT/F. REW or RIGHT/F. ADV buttons to select a starting time period on the 24 hour timetable.

NOTE: The modes used during recording are indicated below.

C: Continuous

M: Motion S: Sensor

R: Emergency Record

- 5. Once you have selected the date, press the SEL button to move to the hourly timetable.
- 6. Select a specific channel or All Channels by using the UP and DOWN arrow buttons.
- 7. Once you have selected the channel(s), use the LEFT/F. REW or RIGHT/F. ADV buttons to move the timeline select bar (purple) to the point you wish to start playing the video clip.
- 8. Press the SEL button to playback the recorded video.



Figure 4.2.1-1. Motion Recording Search Mode Screen

#### 4-2-2. EVENT Window



Figure 4.2.2. Event Search Mode Screen

- 1. Select the option "EVENT" and a calendar will appear (Figure 4.2.2).
- 2. Select the date of the video by using the LEFT, RIGHT, UP, and DOWN buttons to navigate through the days.
- 3. Press the SEL button to move to CHANNEL selection.
- 4. Use the LEFT, RIGHT, UP, and DOWN buttons to select a specific channel or All Channels.
- 5. Press the SEL button to move to TYPE selection.
- 6. Use the LEFT, RIGHT, UP, and DOWN buttons to select All, Motion Only, Sensor Only, Emergency Record Only, or Continuous Record Only.
- 7. Press the SEL button to see the event list.
- 8. Use the UP and DOWN buttons to scroll through the list and use the RIGHT and LEFT buttons to move between pages.
- 9. Press the SEL button to playback the recorded video.

Table 4.2.2-1 ICONS in Event Search Mode Screen

Icon	Description
Α	Select All recording
M	Select Motion alarm recording only
S	Select Sensor alarm recording only
R	Select Manual recording only
С	Select Continuous recording only



Figure 4.2.2-1 Event Search List

#### 4-2-3 DIRECT Window



Figure 4.2.3. Direct Search List

### Go To First Time

You can access the oldest recorded data on the DVR hard drive by selecting **GO TO FIRST TIME** under the DIRECT option.

### **Go To Last Time**

You can access the latest recorded data on the DVR hard drive by selecting **GO TO LAST TIME** under the DIRECT option.

### Go To Specific Time

You can search for video data from a specific instance by setting the date and time in the **GO TO SPECIFIC TIME** search window.

Use the LEFT or RIGHT arrow buttons to move through the date and time values in this menu.

Use the **UP** and **DOWN** arrow buttons to change the date and time values.

Press **SEL** when the appropriate date and time is entered to playback the recorded video file.

**Rev A. December 2007** 43

Specifications and content are subject to change without notice.

## 4-3. Play Mode

During recorded event playback, **vSync DVR** switches from the SEARCH screen to PLAY mode. To return to the SEARCH LIST press the **ESC** button.



Figure 4.3.1. Play Mode Screen

Table 4.3.1. Button Functions in Play Mode

Button	Description
ESC	Returns to the previous menu screen or exits from the setup menu.
	Rewinds. Pressing repeatedly adjusts playback speed.
REW	Reverse playback speeds are indicated as -1x, -2x, -4x and -8x for normal,
	twice, 4 and 8 times normal speed.
	The current speed is shown on the bottom right hand corner of the screen.
	Caution: Max 4x when playing 16 channels at once.
F/REW	Jumps/Step Backward - The playback position moves 60 seconds
	backward.
PLAY/PAUSE	Plays or pauses recorded video.
F/ADV	Jumps/Step Forward – The playback position moves 60 seconds forward.

	Fast forwards. Pressing repeatedly adjusts playback speed.
FF	Fast forward playback speeds are indicated as +1x, +2x, +4x and +8x for
	normal, twice, 4 and 8 times normal speed.
	The current speed is shown on the bottom right hand corner of the screen.
	Caution: Max 4x when playing 16 channels at once.
Directional Buttons	Used to move between the channels.
SEL	Change to full, quad, or 9/16 split display by using the SEL button.
CAP/USB	Press to launch the archive feature.

### 4-4. PTZ Control

NOTE: Requires previous configuration of PTZ devices in SETUP Mode. Press the PTZ button to initiate device control features for a selected channel. See Figure 4.4.1. Select a menu item for the respective control features.



Figure 4.4.1. PTZ Control Screen.

**Table 4.4.1 PTZ Control Menus** 

Item	Description
PAN/TILT	Select menu and use the directional keys for Pan and Tilt.
ZOOM/FOCUS	Select menu and use the UP/DOWN keys for Zoom control.
	Use the LEFT/RIGHT keys to control focus.
INITIALIZE	Initializes PTZ function on selected cameras.

# 5. Archiving Video via USB, or CD-RW

Archives a still image or video clip onto a USB storage device or CD. Data must be captured before archiving.

### 5-1. Capturing Images or Video Clip

Capture still images in live mode or while playing back recorded video. In Live mode, pressing the CAP/USB button twice initiates capturing a still image. See Figure 5.1.1 for an example.



Figure 5.1.1. Archive Mode Screen

The still image is stored on the hard disk drive and may be transferred to a USB storage device by selecting YES, or a CD-RW disk by selecting CD-RW.

User can select backup to USB or CD-RW.

Do you want to backup? NO YES Select media to backup USB stick CD-RW

- 1. From playback mode, pressing the CAP/USB button launches the archiving menu.
- 2. vSync DVR offers two choices, store still image or video. Selecting still images or video captures the respective type of file to the hard disk.
- 3. Insert a USB storage device or CD. Select the corresponding type of storage device, USB or CD-RW. vSync DVR converts the file to a AVI file type and writes to the selected device.

**Rev A. December 2007** 46

Specifications and content are subject to change without notice.

## 5-2. Transferring Still Images or Video Clips onto USB or CD-RW

From live mode, press the **ARCHIVE** button. This launches the **ARCHIVE** screen, which prompts with a calendar for date selection.



Figure 5.2.1. Archive Menu Screen

- 1. Press the **SEL** button to retrieve a list of archived images or video clips for the selected date.
- 2. Select a file from the archive list by using the **UP** or **DOWN** buttons and the **RIGHT** or **LEFT** buttons to move between pages.
- 3. Press the CAP/USB button to transfer to a USB storage device or CD-RW. vSync DVR checks for free space and will not save a file if there is insufficient free space on the storage media.
- **4.** Video files are automatically converted to the AVI file format allowing easy playback from Windows Media Player, or other Media Players supporting MPEG4/AVI file formats.



Figure 5.2.2. List of Archived Files

**vSync DVR** converts USB archived video to the AVI file format for easy viewing with Windows Media Player 10 or higher. If the archived video from **vSync DVR** can not be played with standard video software, it is recommend that you install the FFDSHOW codec included on the installation CD on your Microsoft Windows based PC to properly review archived video files saved on the USB storage device or CD.

#### 5.2.1. How to install Codec

- 1. Insert the **vSync** installation CD provided with **vSync** DVR into the CD drive of your computer.
- 2. Open Codec folder.
- 3. Double-click the file **ffdshow-rev1322\_xxxxx.exe** to install codec program.
- 4. Follow the setup wizard and install using the initial settings for codec, filters, etc.

Note: In case of any technical difficulties with replaying archived video clip, please contact the **vSync DVR** distributor or download GOM Player from: **www.gomplayer.com**.

GOM Player is a multimedia player that is free to download with a relatively small file at 4.13MB, free of spyware and malware.

### 5.2.2. Time Stamp Display

Due to the enhanced security of Windows Media Player 10 running on Windows XP, some further setup is required.

In Windows Media Player, go to Tools->Options->Security, then check "Show local captions when present" as shown below.

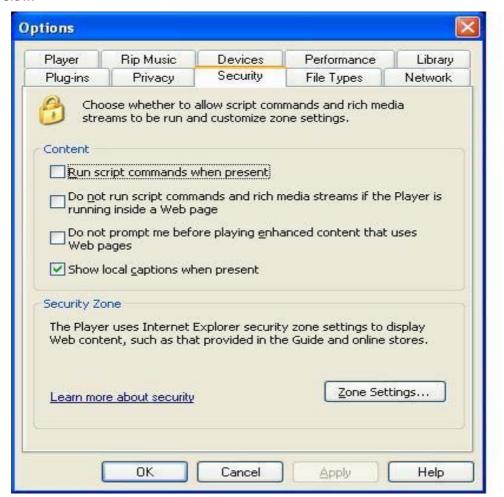


Figure 6.2.3. Setup Screen for Window Media Player 10

#### Caution!

Always backup the contents of your USB storage device before archiving data from vSync DVRs.

- Improper handling of a USB storage device may cause it to become unstable.

Unplugging the USB storage device during a data transfer can cause system errors on the USB storage device's file system.

Before archiving to a USB storage device, always ensure that there is enough free storage space remaining in the device.

**Rev A. December 2007** 49

Specifications and content are subject to change without notice.

# 6. Firmware Upgrade

### 6-1. Preparing USB storage device with Upgraded Firmware

- 1. Before upgrading the system with your USB storage device, create the following directory "E:\upgrade" (E:\ is just an example, your drive letter may be different).
- 2. Copy the firmware file to the \upgrade folder.
- 3. Double-check the name of the firmware file. The filename should be "app9.bin" for the vSync924i (9 Channel DVR) and "app16.bin" for the vSync1624i (16 channel DVR).

### **6-2.** Steps to Complete Upgrade

- 1. Press the **Setup** button and enter the password. Default password is **1111**
- 2. Select **Security** menu from the Setup Screen.
- 3. Select Admin Password followed by "12341234" and the SEL button.
- 4. The DVR will reboot in Test Mode.
- 5. Plug in the USB storage device containing the upgrade firmware.
- 6. Select the **USB UPGRADE** option to start the upgrade.
- 7. After the upgrade is finished, select the **BOOT APPLICATION** option and the DVR will restart to launch the new, upgraded firmware.

### **6-3.** Verifying Software Installation.

- 1. Press **Setup** and log on.
- 2. Select System and press SEL.
- 3. Select **Description** and press **SEL**.
- 4. Check the version displayed.

The version number should match the new firmware version you have installed.

# 7. Network Client - Remote Monitoring and Playback

- 1. Install the vSync network client software to your PC.
- 2. Follow the appropriate instructions in the instructions detailed in section 3-7.
- 3. Connect the vSync DVR to the Network via the Ethernet Port on the rear of the DVR
- 4. The vSync Network Client Software features are explained in a separate manual.

When recording is in progress, **vSync** streams/transmits video identical to the quality settings applied in the record setup menu.



Figure 7.1. vSync Remote Client for Live Monitoring and Remote Search/Playback

## For Networks with Limited Upload Bandwidth

Turning "BANDWIDTH SAVING ON" forces the **vSync DVR** to send only i-frames, saving network bandwidth. You can find this feature in the Network setup screen.

# 8. Remote Setup Using Embedded Web-Server of vSync924i & 1624i

\*\*\*\*\*\*\* Requires Configuring Network Settings in Section 3-7 \*\*\*\*\*\*\*\*\*\*

**vSync** client software provides a remote web interface to access most setup parameters. Please note that Schedule and Motion Zone setup parameters <u>are not supported</u> via the web interface.

To connect to the admin page over the web you can either click on the "Magic Wand/Admin" button in the vSync client program or type <a href="http://ip-address:http-port/admin.htm">http://ip-address:http-port/admin.htm</a> in Microsoft Internet Explorer. (ex: <a href="http://xxx.xxx.xxx.xxx/admin.htm">http://xxx.xxx.xxx.xxx/admin.htm</a>)

(Only Microsoft Internet Explorer is supported, we do not support other third-party browsers, i.e. FireFox.)

Before loading the admin page, the browser will prompt for the User ID and Password.

The default values are "root" and "dw2001," respectively.

See Figures below for examples of Setup pages for each category. After setting all the parameters for each page, <u>make sure to press the APPLY button at the bottom of the page to temporarily store these</u> settings.

After inputting all setup values, go to the "Save Setup" menu and press the SAVE button. The system will reboot to allow the new parameters to take place.

To protect your DVR from unauthorized use, we strongly recommend changing the User ID and Password.

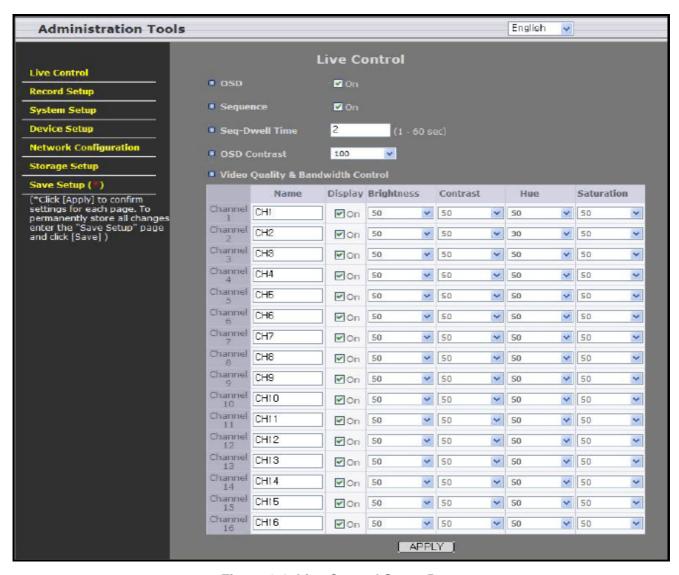


Figure 8.1. Live Control Setup Page

After finishing the set up on the page click on "APPLY" for temporal storage of the parameters.

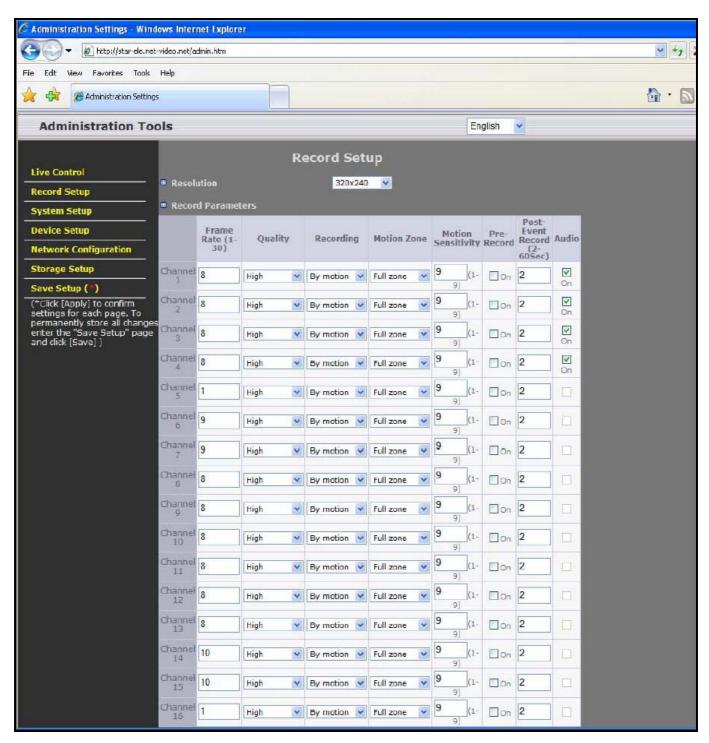


Figure 8.2. Record Setup Page

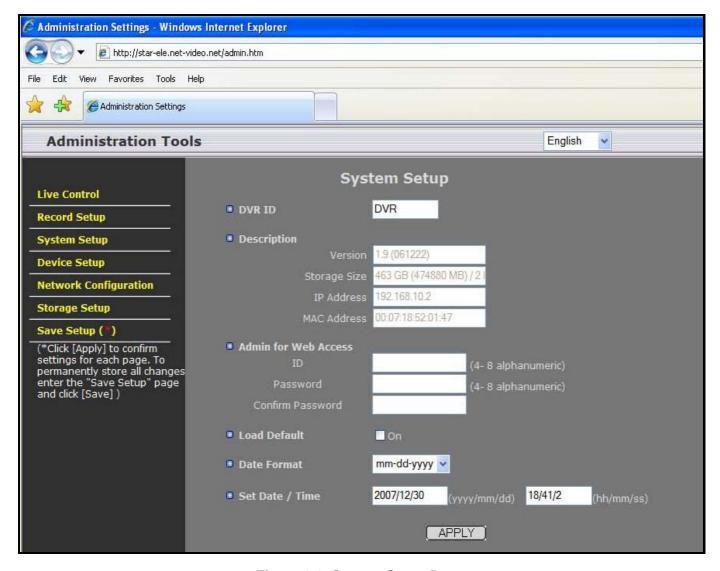


Figure 8.3. System Setup Page

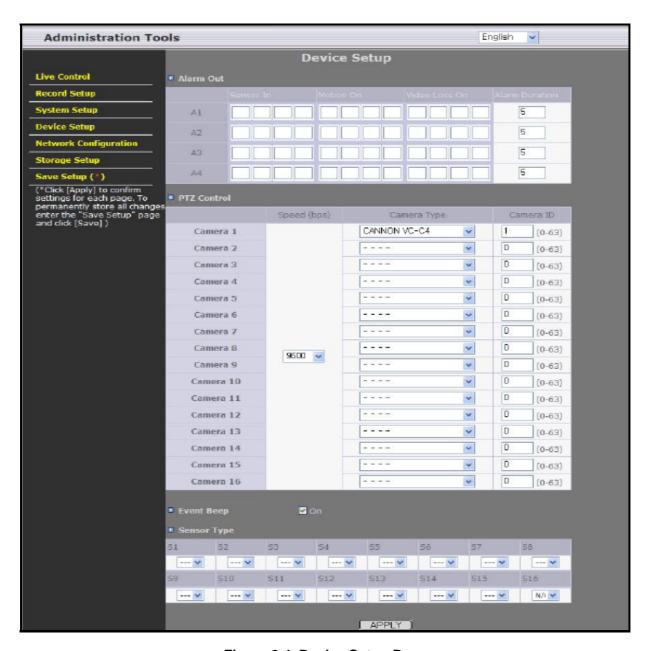


Figure 8.4. Device Setup Page

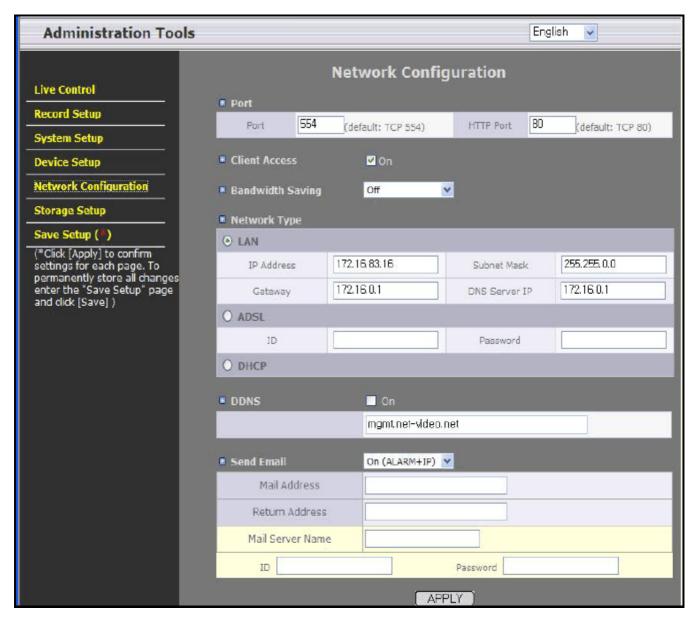


Figure 8.5. Network Configuration Page

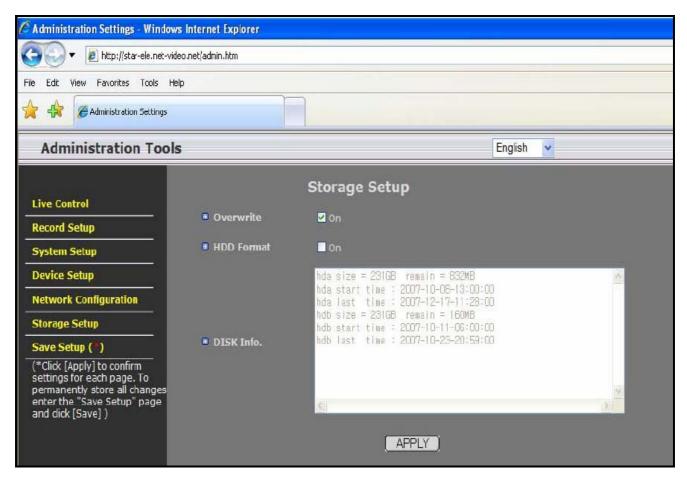


Figure 8.6. Storage Setup Page

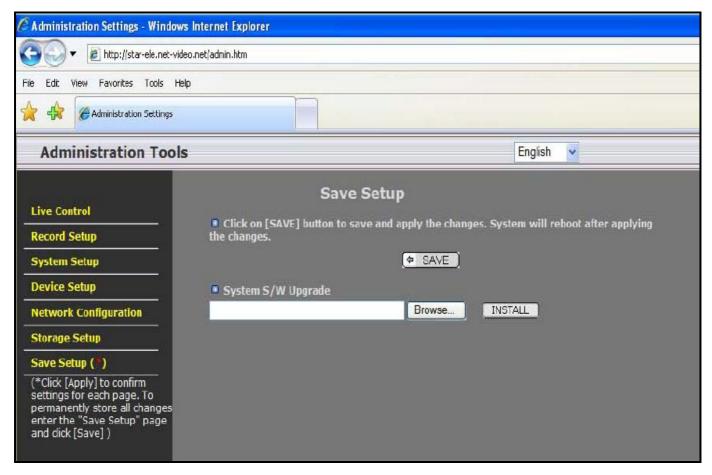


Figure 8.7. Save Setup Page